

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-17 (Canceled)

18) (New) A composition for the treatment of articles made of textile fibres which is intended to be used for washing and/or rinsing, drying in a tumble dryer or ironing articles made of textile fibres comprising at least one water-soluble or water-dispersible dendritic or hyperbranched polymer (P) made by the process comprising the steps of:

a) performing a polycondensation of at least one multifunctional monomer of formula (I) comprising at least three reactive polycondensation functional groups,



in which formula

f is an integer greater than or equal to 2,

the symbol A represents a reactive functional group or a group carrying a reactive functional group chosen from the amino, carboxyl, hydroxyl, oxiranyl, halo or isocyanato functional groups or their precursors,

the symbol B represents a reactive functional group or a group carrying a reactive functional group chosen from the amino, carboxyl, hydroxyl, oxiranyl, halo or isocyanato functional groups or their precursors which is an antagonist of A,

the symbol R represents a linear or branched aliphatic, cycloaliphatic or aromatic

polyvalent hydrocarbon residue comprising from 1 to 50 carbon atoms which is optionally interrupted by one or more oxygen, nitrogen, sulphur or phosphorus heteroatoms, said residue optionally carrying functional groups not capable of reacting with the A and B functional groups, and, optionally,

b) performing at least partial hydrophilic functionalization of the polymer obtained in the polycondensation stage a).

19) (New) The composition according to claim 18, wherein in step a), f is ranging from 2 to 10, the symbol R represents a linear or branched aliphatic, cycloaliphatic or aromatic polyvalent hydrocarbon residue comprising from 3 to 20, carbon atoms which is optionally interrupted by one or more oxygen, nitrogen, sulphur or phosphorus heteroatoms, said residue optionally carrying functional groups not capable of reacting with the A and B functional groups.

20) (New) The composition according to Claim 18, wherein said polycondensation operation is carried out in addition in the presence of at least one bifunctional monomer in the linear form of formula (II) in the corresponding cyclic form comprising two reactive polycondensation/polymerization functional groups

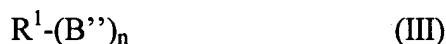


in which formula

the symbol A', which is identical to or different from A, represents a reactive functional group chosen from the amino, carboxyl, hydroxyl, oxiranyl, halo or isocyanato functional groups or their precursors which is an antagonist of B and B',

the symbol B', which is identical to or different from B, represents a reactive functional

group chosen from the amino, carboxyl, hydroxyl, oxiranyl, halo or isocyanato functional groups or their precursors which is an antagonist of A and A',
the symbol R', which is identical to or different from R, represents a linear or branched aliphatic, cycloaliphatic or aromatic polyvalent hydrocarbon residue comprising from 1 to 50 carbon atoms which is optionally interrupted by one or more oxygen, nitrogen, sulphur or phosphorus heteroatoms, said residue optionally carrying functional groups not capable of reacting with the A, A', B and B' functional groups,
the reactive functional group A' being capable of reacting with the B functional group and/or the B' functional group by condensation;
the reactive functional group B' being capable of reacting with the A functional group and/or the A' functional group by condensation;
and/or of at least one "core" monomer of formula (III) comprising at least one functional group capable of reacting by condensation with the monomer of formula (I) and/or the monomer of formula (II)



in which formula

. n is an integer greater than or equal to 1,

the symbol B'' represents a reactive functional group, identical to or different from B or B', chosen from the amino, carboxyl, hydroxyl, oxiranyl, halo or isocyanato functional groups or their precursors which is an antagonist of A and A',

the symbol R¹ represents a linear or branched aliphatic, cycloaliphatic or aromatic

polyvalent hydrocarbon residue comprising from 1 to 50, carbon atoms which is optionally interrupted by one or more oxygen, nitrogen, sulphur or phosphorus heteroatoms or an organosiloxane or polyorganosiloxane residue, said R¹ residue optionally carrying functional groups not capable of reacting with the A, A', B, B' and B'' functional groups,

the reactive functional group B'' being capable of reacting with the A functional group and/or the A' functional group by condensation;

and/or of at least one "chain-limiting" monofunctional monomer of formula (IV)



in which formula

the symbol A'' represents a reactive functional group, identical to or different from A or A', chosen from the amino, carboxyl, hydroxyl, oxiranyl, halo or isocyanato functional groups or their precursors which is an antagonist of B, B' and B'',

the symbol R² represents a linear or branched aliphatic, cycloaliphatic or aromatic polyvalent hydrocarbon residue comprising from 1 to 50, carbon atoms which is optionally interrupted by one or more oxygen, nitrogen, sulphur or phosphorus heteroatoms or an organosiloxane or polyorganosiloxane residue, said R² residue optionally carrying functional groups not capable of reacting with the A, A', A'', B, B' and B'' functional groups,

the reactive functional group A'' being capable of reacting with the B functional group and/or the B' functional group and/or the B'' functional group by condensation;

at least one of the reactive functional groups of at least one of the monomers of formula (II), (III) or (IV) being capable of reacting with an antagonistic functional group of the multifunctional monomer of formula (I).

21) The composition according to Claim 20, wherein n is ranging from 1 to 100.

22) (New) The composition according to Claim 20, wherein:

- the molar ratio of the monomer of formula (I) to the monomer of formula (II) is greater than 0.05;

- the molar ratio of the monomer of formula (III) to the monomer of formula (I) is less than or equal to 1;

- the molar ratio of the monomer of formula (IV) to the monomer of formula (I) is less than or equal to 10.

23) (New) The composition according to Claim 22, wherein- the molar ratio of the monomer of formula (I) to the monomer of formula (II) ranges from 0.125 to 2;

- the molar ratio of the monomer of formula (III) to the monomer of formula (I) ranges from 0 to 1/3;

- the molar ratio of the monomer of formula (IV) to the monomer of formula (I) is less than or equal to 5.

24) (New) The composition according to Claim 18, wherein the functional groups optionally present in the monomers (I) to (IV) and which are not capable of reacting with the A, A', A'', B, B' and B'' functional groups are quaternary ammonium, nitrile, sulphonate, phosphonate or phosphate functional groups.

25) (New) The composition according to Claim 18, wherein the A, A', A'' and

B, B', B'' functional groups are reactive functional groups or groups carrying reactive functional groups being amino, carboxyl, hydroxyl, oxiranyl functional groups or their precursors.

26) (New) The composition according to Claim 25, wherein said functional groups are reactive amino group, carboxyl functional groups, groups carrying reactive amino groups, groups carrying carboxyl functional groups or their precursors.

27) (New) The composition according to Claim 26, wherein the dendritic polymer (P) employed is a hyperbranched polyamide obtained from at least one monomer of formula (I) exhibiting, as reactive polycondensation functional groups, amino functional groups and carboxyl antagonistic functional groups or from a monomer composition comprising in addition at least one monomer of formula (II) and/or (III) and/or (IV) exhibiting the same type(s) of reactive polycondensation functional group(s), it being possible for all or part of the monomer or monomers of formula (II) to be replaced by a lactam.

28) (New) The composition according to Claim 27, wherein the hyperbranched polyamide exhibits hydrophilic functionalities which do not react with the A, A', A'', B, B' and B'' functional groups and is obtained by employing a monomer of formula (III) and/or (IV) exhibiting one or more polyoxyethylene groups and/or a monomer of formula (IV) exhibiting quaternary ammonium, nitrile, sulphonate, phosphonate or phosphate functional groups.

29) (New) The composition according to Claim 28, wherein the hyperbranched

polyamide exhibits hydrophilic functionalities which do not react with the A, A', A'', B, B' and B'' functional groups and obtained by polycondensation of nonfunctionalized monomers and then by modification of the end functional groups of said hyperbranched polyamide by reaction with a compound exhibiting quaternary ammonium, nitrile, sulphonate, phosphonate, phosphate, or polyoxyethylene groups.

30) (New) The composition according to Claim 18, wherein the dendritic polymers, have a weight-average molar mass from 1000 to 1 000 000 g/mol.

31) (New) The composition according to Claim 18, having from 0.001 to 10%, of its weight of the dendritic polymer (P).

32) (New) A process for the treatment of articles made of textile fibres comprising the step of treating said articles during a process of washing and/or rinsing, drying in a tumble dryer or ironing said articles in an aqueous or wet medium, with a composition as defined in Claim 18, as agent contributing, to said articles, antiwrinkling properties or ease-of-ironing properties, said composition having a proportion of dendritic polymer (P) of 0.001 to 10%, by weight of said composition.

33) (New) The process according to Claim 32, wherein the proportion is of 0.01 to 5%.

34) (New) The composition according to Claim 18, provided in the form of:
a solid or of a concentrated aqueous solution or dispersion intended to be brought into contact with articles to be treated after dilution in water;

an aqueous solution or dispersion to be deposited directly on dry articles to be treated without dilution; or

an insoluble solid support comprising said dendritic polymer brought into contact directly with articles to be treated in a wet state.

35) (New) The composition, according to Claim 34, wherein said composition is:

- a solid or liquid detergent formulation comprising from 0.001 to 5% by weight of the dendritic polymer (P) capable of directly forming a detergent bath by dilution;
- a liquid rinsing formulation comprising from 0.001 to 5% by weight of dendritic polymer (P) capable of directly forming a rinsing bath by dilution;
- a solid material, in particular a textile material, comprising from 0.001 to 10% by weight of dendritic polymer (P) intended to be brought into contact with wet articles in a tumble dryer; or
- an aqueous ironing formulation comprising from 0.001 to 5% by weight of dendritic polymer (P).

36) (New) The composition, according to Claim 35, wherein said composition is:

- a solid or liquid detergent formulation comprising from 0.1 to 2%, by weight of the dendritic polymer (P) capable of directly forming a detergent bath by dilution;
- a liquid rinsing formulation comprising from 0.01 to 2%, by weight of dendritic polymer (P) capable of directly forming a rinsing bath by dilution; or
- a solid material, in particular a textile material, comprising from 0.01 to 5%, by weight of dendritic polymer (P) intended to be brought into contact with wet articles in a tumble dryer.